

REMARKS/ARGUMENTS

Claims 1-70 are canceled, and claims 71-75 are amended. Claims 76-101 are newly added. Claims 71-101 are now pending. Applicants respectfully request reexamination and reconsideration of the application.

Applicants note the Restriction requirement and the Election by original presentation. Applicants have canceled non-elected claims 44-70.

Claims 71-75 were rejected under 35 USC § 102(b) as anticipated by U.S. Patent No. 4,116,523 to Coberly et al. ("Coberly"). Applicants respectfully traverse this rejection.

Independent claim 71 is directed to a method of planarizing probes. Groups of the probes are disposed on each of a plurality of substrates. A non-limiting example is shown in Figures 7A and 7B in which elements 704 and 704A are examples of substrates and elements 711 are examples of probes. (Other examples of probes are shown in Figure 2, elements 211.) Referring again to claim 71, a planarity of the probes is adjusted by adjusting the shapes of surfaces of each of the substrates to which the probes are attached. It should be noted that claim 71 requires that a plurality of probes be attached to each substrate.

In contrast to claim 71, Coberly does not disclose a plurality of probes attached to a surface of any one substrate. Failing to disclose a plurality of probes attached to one substrate, Coberly also fails to disclose adjusting the shape of a surface of such a substrate to planarize the plurality of probes attached to the surface of the substrate. Indeed, in the Office Action, circuit contact points 22, 40 were equated with the probes of claim 71. Nowhere in Coberly, however, are there a plurality of contact points 22, 40 attached to a surface of one substrate, nor is the shape of such a surface adjusted in order to planarize the plurality of contact points 22, 40 attached to the one substrate. Therefore, independent claim 71 patentably distinguishes over Coberly.

Claims 72-88 depend from claim 71 and therefore also distinguish over Coberly. Moreover, claims 72-88 recite additional features that further distinguish over Coberly.

For example, claim 73 requires both a pulling force and a pushing force be applied to one of the substrates. No combination of pulling and pushing forces is disclosed in Coberly. Contrary to the assertion in the Office Action, there is no teaching in Coberly that a pulling force is applied to or through the coaxial cable 60.

As another example, claim 74 states that the pulling force is applied to a central region of the surface of the substrate and the pushing force is applied to a peripheral region of the surface. Again, Coberly provides no such teaching.

As yet another example, claim 76 states that the step of adjusting a shape of a surface of a substrate is done without contacting the device or devices to be tested. Any alleged shape adjusting in Coberly as referred to in the Office Action would occur only as a result of circuit contact points 22, 40 being pressed against the device to be tested 58. Thus, Coberly fails to meet the additional feature described in claim 76.

As still further examples, claims 78-84 describe using one or more actuators to impart pushing and/or pulling forces to one or more of the substrates to adjust the shape the surface of the substrate or substrates to which the probes are attached. Coberly does not disclose an actuator for adjusting the shape of a substrate.

Claims 85 and 86 state that an array of probes is attached to one or both of the substrates. Coberly discloses no one substrate to which an array of probes is attached.

Claim 87 states that the probes are elongate and resilient and therefore provide individual compliance with respect to the terminals of the device to be tested. (The resilient contact structures 211 of Figure 2 are nonlimiting examples of such probes.) Claim 87 further states that the step of adjusting the shape of a substrate provides global planarization of the plurality of probes attached to the substrate. In other words, the step of adjusting the shape of a substrate planarizes the plurality of probes attached to the substrate *en masse*. Even if Coberly's circuit contact points 22, 40 are deemed resilient and therefore provide individual compliance, nothing in Coberly provides for global planarization of a plurality of such probes attached to one substrate.

For all of the foregoing reasons, dependent claims 72-88 further distinguish over Coberly.

New independent claim 89 is directed to a method of testing an electronic device using a probe card assembly. The probe card assembly includes a plurality of substrates, and each substrate has a plurality of probes attached to the substrate. Before contacting the electronic device to be tested in method claim 89, a planarity of the probes is adjusted by separately adjusting a shape of each of the substrates to which the probes are attached. After the planarity is adjusted, the probes are brought into contact with the electronic device, and the electronic device is tested.

As discussed above, any alleged adjusting of probe substrates that occurs in Coberly as described in the Office Action occurs only as the circuit contact points 22, 40 are pressed against the device to be tested 58. Coberly thus fails to disclose adjusting the planarity of probes before contacting the device to be tested. Therefore, new independent claim 89, as well as its dependent claims (claims 90-101), patentably distinguish over Coberly.

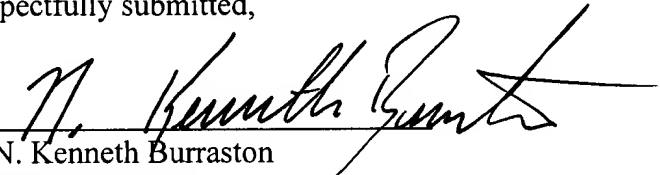
As a final note, Applicants did not receive copies of the 1449 forms filed with Information Disclosure Statements on April 8, 2002 and June 19, 2002. Those 1449 forms were not attached to the copy of the Office Action dated April 9, 2004 that Applicants received in the mail. Applicants accordingly request that copies of those 1449 forms be included with the next communication from the PTO.

In view of the foregoing, Applicants submit that all of the claims are allowable and the application is in condition for allowance. If the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 323-5934.

Respectfully submitted,

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